

# **EXHIBIT F**

**Declaration of Philip P. Mann**

**Case No. 21-CV-0817-TSZ**

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IN ARBITRATION PROCEEDINGS BEFORE

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JAMS

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BUNGIE, INC., a Delaware )  
corporation, )

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Claimant, )

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v. )

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AIMJUNKIES.COM, a business of )  
unknown classification; PHOENIX )  
DIGITAL GROUP, LLC, an Arizona )  
limited liability company; )  
JEFFREY CONWAY, an individual; )  
DAVID SCHAEFER, an individual; )  
JORDAN GREEN, an individual; )  
and JAMES MAY, an individual, )

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Respondents. )

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DEPOSITION UPON ORAL EXAMINATION OF  
JORDAN WILLIAM GREEN

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CONTAINS CONFIDENTIAL BUSINESS INFORMATION SUBJECT TO  
PROTECTIVE ORDER

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October 12, 2022  
9:25 a.m.

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Taken at the instance of the Claimant

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Stephanie C. Rhinehart, CCR, CSR, RPR  
Certified Court Reporter and Certified Shorthand Reporter  
WA License No. 22013531 OR License No. 22-0014

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CERTIFIED COPY

No. 5160000075

1 Q. Whom are you advising?

2 A. I'm not personally advising anyone.

3 Q. Who is advising someone?

4 A. I believe that the -- the parties involved in the  
5 purchase, Andreas Banek and Blome Entertainment, were  
6 told that, if they needed anything from us or needed  
7 any questions answered, they could reach out to  
8 Mr. Schaefer.

9 (Reporter requests clarification.)

10 Q. BY MR. RAVA: Have you had any interaction yourself,  
11 personally, with Andreas Banek?

12 A. No.

13 Q. Have you had any personal interaction with anyone else  
14 associated with -- or anyone at all associated with  
15 Blome?

16 A. I don't believe so.

17 Q. Were you personally paid for the sale of AimJunkies?

18 A. I received compensation, yes.

19 Q. When?

20 A. In the process of the sale.

21 Q. Do you have a recollection of when that was?

22 A. Not exactly.

23 Q. How did you receive it?

24 A. I received a crypto payment.

25 Q. Do you have a crypto wallet?

1 A I personally have a crypto wallet, yes.

2 Q. Do you have more than one personal crypto wallet?

3 A. No.

4 Q. And in what currency did you receive this payment?

5 A. Bitcoin.

6 Q. And how much Bitcoin did you receive?

7 A. I don't remember.

8 Q. Was it more than the equivalent of \$10,000 in Bitcoin?

9 A. I don't believe so, but I'm not sure.

10 Q. Were you involved in negotiating the price for the sale  
11 of AimJunkies?

12 A. No.

13 Q. Who was?

14 A. Mr. Schaefer.

15 Q. When did you first consider selling AimJunkies?

16 MR. MANN: Object to the form.

17 Q. BY MR. RAVA: Let me ask that again.

18 When was the prospect of the sale of AimJunkies  
19 first raised to you?

20 A. We've had offers to buy the website for years. So the  
21 prospect of selling the website has been a topic that  
22 has come up over -- over the years.

23 Q. Did you seriously consider selling it before, selling  
24 it to Blome?

25 A I would say that I entertained the offer previously. I

1 feel like that's a fair assessment.

2 **Q. Do you recall any other offers that were made?**

3 A. Not off the top of my head. I don't remember.

4 **Q. Were you involved in those -- in those efforts?**

5 A. Not always.

6 **Q. Sometimes?**

7 A. Can you define "involved"?

8 **Q. Or engaged in communications with the counterparty?**

9 A. I generally didn't engage in the communication with the  
10 counterparty.

11 **Q. Who would do that?**

12 A. Mr. Schaefer.

13 **Q. Do you recall an offer from CoDHacks.ru?**

14 A. The website sounds familiar.

15 **Q. How are you aware of that website?**

16 A. I believe it jogs my memory. I'm not sure.

17 MR. RAVA: Excuse me for a minute. Maybe we  
18 could go off the record for three minutes.

19 (Discussion off the record.)

20 BY MR. RAVA:

21 **Q Mr. Green, I'm just handing you what the court reporter**  
22 **has marked as Exhibit Number 2. Have a look at,**  
23 **particularly, the second page of this document.**

24 **Have you seen this document before?**

25 A. I don't know that I've seen this document before, but I

<p style="text-align: right;">Page 106</p> <p>1 see any reference of closing conditions in Exhibit 4.</p> <p>2 Q. Do you have an understanding of what the current</p> <p>3 process -- what the current status of the -- the</p> <p>4 transition, as between Aim- -- Phoenix Digital and the</p> <p>5 buyer is?</p> <p>6 MR. MANN: Object to the form of the</p> <p>7 question.</p> <p>8 Q. BY MR. RAVA: Let me try to reframe that.</p> <p>9 A. Okay.</p> <p>10 Q. Do you understand what the current status is of the</p> <p>11 sale of AimJunkies by Phoenix Digital?</p> <p>12 A. I believe that the website and the assets described</p> <p>13 have been sold and transferred. And as far as I'm</p> <p>14 aware, we are providing the agreed-upon services to</p> <p>15 continue providing the -- the infrastructure needed to</p> <p>16 run it in the meantime.</p> <p>17 Q. Are there any legal transitions still undergoing?</p> <p>18 MR. MANN: Object to the form of the</p> <p>19 question.</p> <p>20 THE WITNESS: Not that I'm aware.</p> <p>21 Q. BY MR. RAVA: What would they be, if there were?</p> <p>22 MR. MANN: Object to the form the question.</p> <p>23 Assumes matters not in evidence.</p> <p>24 THE WITNESS: What would they be, if any? I</p> <p>25 don't know what they would be.</p>	<p style="text-align: right;">Page 107</p> <p>1 Q. BY MR. RAVA: You're not aware of any legal issues</p> <p>2 that need to be resolved with respect to the sale?</p> <p>3 A. No, I'm not aware.</p> <p>4 Q. As far as you know, it's complete?</p> <p>5 A. Yes.</p> <p>6 MR. RAVA: I think now would probably be a</p> <p>7 good time to take a lunch break.</p> <p>8 MR. MANN: Sure.</p> <p>9 (Break in proceedings at 12:42 p.m.)</p> <p>10 BY MR. RAVA:</p> <p>11 Q. Mr. Green, I'd like to talk about the process by which</p> <p>12 you developed the cheats that you developed and then</p> <p>13 used on Velocity Cheats.</p> <p>14 A. Okay.</p> <p>15 Q. Okay. So I want to just sort of talk through it on a</p> <p>16 step-by-step basis. And, maybe, using as an example --</p> <p>17 as an example, the first one you mentioned was for</p> <p>18 Modern Warfare that we talked about.</p> <p>19 A. Okay.</p> <p>20 Q. So what would you first do when you were trying to</p> <p>21 develop a cheat like that one?</p> <p>22 A. That cheat in particular, I had a background knowledge</p> <p>23 on the game engine, how it worked -- which is</p> <p>24 indispensable. It's valuable to know how it works if</p> <p>25 you're going to figure it out; right?</p>
<p style="text-align: right;">Page 108</p> <p>1 But let's say the newest Call of Duty game came</p> <p>2 out -- Modern Warfare 2 in 2009, or whenever it came</p> <p>3 out. I would have bought the game because I was</p> <p>4 playing it. And I would have started by trying to find</p> <p>5 the things that are recognizable to me, the different</p> <p>6 structures that I know that are part of the game</p> <p>7 engine, because they always use Quake 3 for their game</p> <p>8 engine. So I guess I start by trying to apply what I</p> <p>9 know about the last game that I've seen on that game</p> <p>10 engine to the new one.</p> <p>11 Q. And are you doing that while playing the game?</p> <p>12 A. Am I effectively reverse engineering and understanding</p> <p>13 the game while playing it is what you're asking?</p> <p>14 Q. Is the game -- well, is the game running while you are</p> <p>15 trying -- while you are reverse engineering it?</p> <p>16 A. It depends on the approach you're taking. But, yes,</p> <p>17 that is -- that is one of the ways that you could see</p> <p>18 what's going on -- is by observing what the program's</p> <p>19 doing in real time.</p> <p>20 Q. And what exactly are you looking for? And let's just</p> <p>21 take one feature, for example. Let's take the ESP</p> <p>22 feature that we discussed earlier.</p> <p>23 A. Okay.</p> <p>24 Q. What exactly would you be looking for in the game</p> <p>25 engine structures?</p>	<p style="text-align: right;">Page 109</p> <p>1 A. To make ESP work?</p> <p>2 Q. To make ESP work.</p> <p>3 A. The basics for -- to make ESP work -- and these are</p> <p>4 actually more or less the basics to make, like, the</p> <p>5 entire -- a lot of features work -- is you need to know</p> <p>6 where you are in the game space. It's like a 3D graph,</p> <p>7 essentially. You need to know where you are; and you</p> <p>8 need to know where the enemy is. And then you need to</p> <p>9 know which way you're looking. The way that this is</p> <p>10 described in the game engine is by the camera.</p> <p>11 So part of your player presence in the game is</p> <p>12 your player's camera, and that's the window you view</p> <p>13 through. So you need to find the camera structure,</p> <p>14 which is essentially -- if memory serves, it's three</p> <p>15 vectors, which are essentially four working variables</p> <p>16 per vector. So it's a bunch of numbers. It's also</p> <p>17 very generic. Almost every game I've ever looked at or</p> <p>18 am aware of uses almost exactly the same underlying</p> <p>19 math. Once you take away all the layers of</p> <p>20 abstraction, it's the same basic concept.</p> <p>21 So if you know where you are, where you're</p> <p>22 looking, and where the other player is, then you have</p> <p>23 everything that you need to do a World to Screen</p> <p>24 calculation and say, "Okay. I know that this person's</p> <p>25 in 3D space, but I want to know, do they exist on my 2D</p>

<p style="text-align: right;">Page 110</p> <p>1 camera view?" If they do, I can run it through a World  2 to Screen function, which is a very publicly talked  3 about function in game development, and it will give me  4 the screen coordinates of where this person might be on  5 my screen. And then, from there, since you have screen  6 coordinates, you can essentially draw a box around them  7 or put an icon -- or their name or whatever information  8 you want to display to the user.</p> <p>9 <b>Q. So to figure out where you are or where the other</b>  10 <b>people are, you are looking at what?</b></p> <p>11 A. There's a few ways to do this. I have reverse  12 engineered games where I end up looking at the game  13 code to determine how it's interfacing and storing  14 these variables.</p> <p>15 I've also done it the hard way, where I literally  16 sit there in-game with someone else and I say, "Okay.  17 Move three feet to the right." And maybe, at this  18 point, I've already found my position. So I know that,  19 if they line themselves up this way and they move this  20 direction, it's largely going to be only changing one  21 of their three coordinate axes in the 3D space. And  22 then I can search -- "Okay. Well, if I know that if  23 they move that direction, right, that value goes up for  24 me. Well, then their value should go up." So I search  25 for a value that has increased using a program that can</p>	<p style="text-align: right;">Page 111</p> <p>1 search memory for a change.</p> <p>2 And then, if they move back -- "Okay. Well, okay.  3 Now let's look for a value that decreased." And then  4 you sprinkle in some of the "Okay. Well, don't move,  5 and let me just search for a value that didn't change."  6 So you can start to identify this value is describing  7 where this person is moving in this 3D game arena. And  8 so now I know for that instant of the game, for that  9 player in the game, I know where his position's stored.  10 So then, from there, are you familiar with the concept  11 of a pointer?</p> <p>12 <b>Q. No. Not -- I mean, generally, but not -- I hesitate to</b>  13 <b>say that I'm familiar with it in the context that</b>  14 <b>you're about to use it. So please describe it for me.</b></p> <p>15 A. So in computers -- I'm going to stick with 32-bit  16 computers. I'm not going to talk about 64-bit just to  17 keep it real simple. Everything is stored on -- in  18 4-byte chunks. So a pointer is a 4-byte piece of  19 memory that stores an address to another piece of  20 memory. So it's saying, "Hey, if you know what's in  21 here, you can then follow that address and say, 'Okay.  22 What's at that?'"</p> <p>23 So what I'm doing then is -- I know that this game  24 is object-oriented. It uses pointers to store player  25 data and it uses that to organize its data. So I know</p>
<p style="text-align: right;">Page 112</p> <p>1 that there's a pointer somewhere to the -- to where  2 this player's data's stored. The game has access to it  3 somehow. So then I can go and search -- do a pointer  4 search for all the values from that address, 200 values  5 up. So I'm looking for any other memory location that  6 holds the value of those addresses.</p> <p>7 And through brute force -- and I've done this  8 successfully several times -- you can completely  9 understand the structure of a game without ever looking  10 at code. And I've created cheats completely by doing  11 that. But that's just one method, yeah.</p> <p>12 <b>Q. But that method involves -- you are accessing the</b>  13 <b>memory of the game in order to figure out what values</b>  14 <b>change when or stay the same?</b></p> <p>15 A. Accessing the memory of the process.</p> <p>16 <b>Q. Right. Okay. So once you have those things, you</b>  17 <b>understand where you are, where the enemy is, the</b>  18 <b>camera angles --</b></p> <p>19 A. Mm-hmm.</p> <p>20 <b>Q. -- or camera structure?</b></p> <p>21 A. It's referred to as a "view matrix."</p> <p>22 <b>Q. Okay.</b></p> <p>23 A. But it's a description of -- if you were to take your  24 camera and look down, there's a component that handles  25 your -- your vertical component, the horizontal</p>	<p style="text-align: right;">Page 113</p> <p>1 component, and then roll. And so those are the three  2 components of a view matrix. But the camera view  3 matrix doesn't say the position of the camera. It's  4 not always included. It's sometimes -- it's assumed  5 it's just the position of the player.</p> <p>6 <b>Q. I see. Then, once you have those things -- then what</b>  7 <b>do you do?</b></p> <p>8 A. Those are the basic inputs to a World to Screen  9 function.</p> <p>10 <b>Q. Okay. Tell me about this World to Screen function.</b></p> <p>11 A. So I don't have any reason to believe that this  12 wouldn't be true: Every game in existence that models  13 a 3D world on a 2D screen has some sort of World to  14 Screen functionality, and the algorithms are almost  15 identical. So for example, the World to Screen  16 function on this Modern Warfare 2 game that we're  17 talking about, when Modern Warfare 3 came out, I didn't  18 have to change that code at all. In fact, that code is  19 code that I had adapted from some public "how to build  20 a game" code that I had found, "how to do World to  21 Screen," you know. And I had maintained that code.  22 And that's the -- that's just a tool in the tool kit of  23 the cheat.</p> <p>24 And then, let's say I then take that cheat and  25 make it work on Battlefield: Bad Company 2. That's a</p>

<p style="text-align: right;">Page 114</p> <p>1 different game. It's a Battlefield game, not a Call of</p> <p>2 Duty game. They're made by different developers;</p> <p>3 they're different games engines entirely. But the</p> <p>4 World to Screen function only takes a little bit of</p> <p>5 tweaking. Sometimes it's -- it's inverting the sign of</p> <p>6 a specific part of the calculation. So, like, for</p> <p>7 example, it might tell me they're right in front of me</p> <p>8 when they're directly behind me. Well, obviously, I</p> <p>9 need to invert that part of it to where, when they're</p> <p>10 behind me, it says that their behind me; right? And if</p> <p>11 they're in front of me, it gives me the correct</p> <p>12 position. So the World to Screen function, in my</p> <p>13 experience, can be adapted to any -- any 3D to 2D</p> <p>14 conversion like that.</p> <p>15 <b>Q. What other steps do you then take as you're trying to</b></p> <p>16 <b>get this ready to be functional and distributable?</b></p> <p>17 A. A lot of times, you need a game -- well, functional and</p> <p>18 distributable -- can you repeat the question one more</p> <p>19 time?</p> <p>20 <b>Q. So you've -- we're walking through the process of you</b></p> <p>21 <b>developing a cheat here. And you say you've got the</b></p> <p>22 <b>three things. You've got the three things figured out.</b></p> <p>23 <b>You run through a World to Screen function, and now</b></p> <p>24 <b>you're able to -- as you say, draw, put an arrow on it,</b></p> <p>25 <b>or put the guy's name or put the box around it or</b></p>	<p style="text-align: right;">Page 115</p> <p>1 something. So then what do you do? Then you have</p> <p>2 what? A chunk of code --</p> <p>3 A. Yeah.</p> <p>4 <b>Q. -- that does that? What do you do?</b></p> <p>5 A. So the -- there's, again, multiple ways to do this.</p> <p>6 The way that these internal cheats work is they're</p> <p>7 built as what's called a DLL file.</p> <p>8 <b>Q. DLL?</b></p> <p>9 A. Yes.</p> <p>10 <b>Q. Okay.</b></p> <p>11 A. There are three types of executable files on a Windows</p> <p>12 operating system. And these three types are actually</p> <p>13 mirrored in some -- their functional equivalents are</p> <p>14 seen on every operating system -- Linux, Mac...</p> <p>15 But on Windows, it's three versions of the same</p> <p>16 file format. You have an EXE, a DLL, and a DOTSYS</p> <p>17 file. An EXE is as normal program. When you run it,</p> <p>18 Windows will start you up a process, load that program</p> <p>19 into it, and say, "Here's your little box that you can</p> <p>20 exist in."</p> <p>21 A DLL file is a dynamic-link library. And what</p> <p>22 that is is that's a set of functionality that a program</p> <p>23 can import and use. So it can say, "Hey" -- like, for</p> <p>24 example, most games use, like, DirectX to render onto</p> <p>25 the screen using the graphics card. It's an</p>
<p style="text-align: right;">Page 116</p> <p>1 accelerated graphics API from Windows. So they'll load</p> <p>2 the DirectX functionality, which are Windows system</p> <p>3 binaries. They'll say, "Hey, I need to load that."</p> <p>4 And so that loads that code into the system, and it's</p> <p>5 then available for the program to use.</p> <p>6 And then a DOTSYS file is a driver file. It's</p> <p>7 much like a DLL, but it's loaded into the Windows</p> <p>8 kernel. So the cheats that I've created are created as</p> <p>9 a DLL file. And there's a method that is well-known in</p> <p>10 research and documented called DLL injection. And so</p> <p>11 the only difference between a normally loaded DLL and a</p> <p>12 DLL injection is a DLL that was loaded through an</p> <p>13 external source -- so it wasn't that the programs said,</p> <p>14 "Hey, I need this to work"; it's that the DLL was</p> <p>15 loaded by something else.</p> <p>16 And this happens all the time. So you've got,</p> <p>17 like, Steam, Discord, even OBS will have an in-game</p> <p>18 component that will load to where you can hit, like, a</p> <p>19 key combination on your keyboard and bring up the chat</p> <p>20 window and talk to your buddies or join their game or</p> <p>21 whatever functionality they want to bring into the</p> <p>22 game. And that becomes a part of the game. And it</p> <p>23 renders on the screen.</p> <p>24 So much like that, that's how the cheats load.</p> <p>25 The only difference is that we -- in my experience, the</p>	<p style="text-align: right;">Page 117</p> <p>1 way I've done it is, in order to facilitate that "not</p> <p>2 touching the disk part" that I brought up earlier, we</p> <p>3 use a DLL injection method called "manually mapping,"</p> <p>4 which is recreating the functionality of Windows</p> <p>5 loading that DLL manually.</p> <p>6 <b>Q. Why do you do that?</b></p> <p>7 A. Because if you were to ask Windows to load the DLL, the</p> <p>8 only way that Windows allows you to load a DLL is by</p> <p>9 supplying a file path. And that would -- because</p> <p>10 that's the only way is -- to supply a path on the disk,</p> <p>11 you would have to put the DLL on the disk for it to be</p> <p>12 loaded into the game -- or into the process.</p> <p>13 <b>Q. All right. So now you've got your DLL injection file?</b></p> <p>14 A. Mm-hmm.</p> <p>15 <b>Q. And is that the file that is -- that the loader</b></p> <p>16 <b>eventually loads up to a customer's -- to -- for a</b></p> <p>17 <b>customer?</b></p> <p>18 A. Yes.</p> <p>19 <b>Q. And that DLL injection file resides where?</b></p> <p>20 A. In the case of Velocity Cheats, it resided on my server</p> <p>21 for Velocity Cheats.</p> <p>22 <b>Q. In the case of the cheats offered by Phoenix Digital,</b></p> <p>23 <b>from AimJunkies.com, where did those -- where did the</b></p> <p>24 <b>files, the DLL injection or whatever they were -- where</b></p> <p>25 <b>they did they reside?</b></p>



<p style="text-align: right;">Page 118</p> <p>1 A. As far as I'm aware, with the loader -- the third-party 2 loader, it gave a couple options. They could reside on 3 the server stored on the AimJunkies server, or they 4 could specify, like, an API URL where the cheat could 5 be loaded from an external service if the coder chose 6 to do that.</p> <p>7 <b>Q. Did -- so were some cheats available on -- from an</b> 8 <b>AimJunkies server?</b></p> <p>9 A. Yes.</p> <p>10 <b>Q. So why -- sorry. Explain to me why, again, it's</b> 11 <b>important to avoid touching the disk so that you're</b> 12 <b>doing the manual mapping bit with the DLL -- with</b> 13 <b>that --</b></p> <p>14 A. So when a DLL file or any executable file is on-disk, 15 it exists in a different format than when it's loaded 16 into memory. So these are the differences between, 17 like, the file space and the virtual address space in 18 the process. And what this means is there's -- 19 remember I told you about those sections of the file?</p> <p>20 <b>Q. Right.</b></p> <p>21 A. Those aren't modified much when the DLL or the program 22 is loaded. But they get moved from being right butted 23 up against each other in the file to moved out into 24 their executable address space. And they end up -- 25 there's gaps that are created on purpose.</p>	<p style="text-align: right;">Page 119</p> <p>1 So for example, like, I told you about that data 2 section in the executable file. Let's say that your 3 data section is 2,000 bytes long. But on the file, it 4 isn't 2,000 bytes long because it's a runtime data 5 section. So it is describing data that is not supposed 6 to be included in the file but gets generated or used 7 at runtime. So in reality, the compiler can make the 8 data section on a disk 200 bytes long. Because that's 9 the only thing that needs to be there when the program 10 starts up. But when Windows loads the file, it creates 11 the space for the 2,000 bytes and sets it all to zero, 12 initializes it.</p> <p>13 And so that -- by doing that -- and, also, when 14 you load a file into memory, the DLL file, it can be 15 relocatable, which means it can load a bunch of 16 different addresses, potentially. It doesn't care where 17 it's loaded. So modifications will be needed to be 18 made to final by Windows -- this is all built in -- to 19 relocate the file to that new place so that, when you 20 call this function, it actually calls the function 21 instead of just assuming that it's where it could be, 22 but it's not.</p> <p>23 And so all of that lends a layer of assumed 24 security, maybe security through obscurity to the 25 cheat, because the file that you can actually inject no</p>
<p style="text-align: right;">Page 120</p> <p>1 longer exists. It's never existed in a whole form on 2 the user's PC, essentially. And then, also, if we 3 dropped it to disk, they could just copy the file. And 4 then it would be up to any protection or DRM, 5 essentially, built into the file -- into the cheat 6 itself to protect itself.</p> <p>7 <b>Q. So it's a self-security mechanism?</b></p> <p>8 A. Essentially.</p> <p>9 <b>Q. And an "avoid detection" mechanism or avoid -- yeah --</b></p> <p>10 A. I would -- I would be hesitant to call it an "avoiding 11 detection" mechanism. I imagine that was one of the 12 original purposes of whoever came up with the idea to 13 manually map. But at this point, manually mapping is 14 not a way to get around any -- any anti-cheat that 15 wasn't programmed by a very small developer who doesn't 16 know what they're doing.</p> <p>17 <b>Q. Okay. So does it have ways to get around an</b> 18 <b>anti-cheat, then?</b></p> <p>19 A. Does what?</p> <p>20 <b>Q. Does the method that you described with the DLL</b> 21 <b>injection file?</b></p> <p>22 A. It -- so when you inject a DLL -- or, like, when you 23 load a DLL the right way -- there are artifacts that 24 are created, like the fact that, in the loaded module 25 that's in the process, it'll be less -- its file path.</p>	<p style="text-align: right;">Page 121</p> <p>1 So you get around that.</p> <p>2 But you also create things that are bigger red 3 flags than a random module that's loaded, like the fact 4 that you just created an allocation of memory that has 5 read/write and execute permissions. And that's not 6 something you usually see in a normal running program.</p> <p>7 So there's artifacts that are created. There's 8 upsides and downsides to manually -- manual map. 9 It's not a perfect solution. It's not the one-shot 10 bypass.</p> <p>11 <b>Q. Okay. Would you do other -- would you add other</b> 12 <b>features that would assist with the bypass?</b></p> <p>13 A. For the version of the cheat that I'm distributing?</p> <p>14 <b>Q. Yeah.</b></p> <p>15 A. No. I have directly and aggressively bypassed the 16 anti-cheats before, but I never distributed that 17 technology.</p> <p>18 <b>Q. Did Phoenix Digital?</b></p> <p>19 A. I believe that there were technologies that were 20 contracted for that would -- there was never a 21 technology that was intentionally developed to bypass 22 any specific anti-cheat.</p> <p>23 <b>Q. How do you know that?</b></p> <p>24 A. Because I feel like the mark that I had on this company 25 during the time when I was a cheat developer and when I</p>

<p style="text-align: right;">Page 122</p> <p>1 created these things, my ethos was to not create a</p> <p>2 bunch of waves, not -- not be noisy on the user system</p> <p>3 and try to evade rather than bypass.</p> <p>4 <b>Q. What's the difference between evading and bypassing?</b></p> <p>5 A. So in my opinion, bypassing is, like -- let's take a --</p> <p>6 what's a good example? Back in the day, Battlefield</p> <p>7 used an anti-cheat called Punk Buster from a</p> <p>8 now-defunct company called Even Balance. They had</p> <p>9 signature scans. I brought those up.</p> <p>10 And anti-cheats -- generally, one of the most</p> <p>11 basic things an anti-cheat will do is it will implement</p> <p>12 signature scans, just like an antivirus. And so it's</p> <p>13 looking for known patterns that are known to be unique</p> <p>14 to cheats that are -- and then the preface here is that</p> <p>15 they have to know it exists, which is part of the</p> <p>16 reason why, in the antivirus market, you've noticed</p> <p>17 that they've gone to these heuristic detections.</p> <p>18 Because a signature scan, you have to know what you're</p> <p>19 looking for in order to find it.</p> <p>20 Well, the thing is -- let's say they got a</p> <p>21 signature on my cheat. This happened to me when I was</p> <p>22 playing Battlefield 2 a couple times. Well, if I can</p> <p>23 find a way to change that signature, then they no</p> <p>24 longer have that detection on me. So I didn't go in</p> <p>25 and hack the anti-cheat. I didn't go in and bypass</p>	<p style="text-align: right;">Page 123</p> <p>1 protections. All I did was identify that "I think</p> <p>2 they've got a signature on me. Let me change some</p> <p>3 stuff and see if my detection goes away." That's one</p> <p>4 way to do it.</p> <p>5 It's also possible -- and I've done this before --</p> <p>6 to -- you just take apart the anti-cheat to figure out</p> <p>7 how it works. And it's possible to create a full</p> <p>8 bypass that hooks in and completely disables the</p> <p>9 anti-cheat. But that's rather noisy, you know.</p> <p>10 That's -- that's like robbing a bank by kicking down</p> <p>11 the front door and starting to shoot the place up. You</p> <p>12 know, it's very -- if you don't get every -- if you</p> <p>13 don't defeat every security measure, you're going to</p> <p>14 get caught.</p> <p>15 So, you know, while -- when I first got started</p> <p>16 cheating, people would be distributing these cheats</p> <p>17 that had full bypasses. "Oh, Punk Busters" -- well,</p> <p>18 how long does that last? You know, is there any</p> <p>19 lifetime to that? Where, if they just don't know I</p> <p>20 even exist and they can't find me, that's not my</p> <p>21 problem; that's theirs.</p> <p>22 <b>Q. Is it possible to develop a cheat for a game without</b></p> <p>23 <b>having a copy of the game?</b></p> <p>24 A. I would say it's possible. It would be difficult, and</p> <p>25 you'd be leveraging a lot of public sources to do so.</p>
<p style="text-align: right;">Page 124</p> <p>1 <b>Q. Someone else would have to have a copy of the game?</b></p> <p>2 A. Yeah.</p> <p>3 <b>Q. And someone else would have to be providing information</b></p> <p>4 <b>about that?</b></p> <p>5 A. Which -- which happens often in a public setting.</p> <p>6 <b>Q. So tell me the ways in which the loader then interacts</b></p> <p>7 <b>with this, using our example. We now have a DLL</b></p> <p>8 <b>inject -- is it eject or injection? Inject file.</b></p> <p>9 A. Okay.</p> <p>10 <b>Q. And how does the loader then interact with that in</b></p> <p>11 <b>order to make it operable?</b></p> <p>12 A. We're still talking about my loader --</p> <p>13 <b>Q. We're talking your loader?</b></p> <p>14 A. Okay.</p> <p>15 <b>Q. And your -- I think we were talking about your</b></p> <p>16 <b>Call of Duty: Modern Warfare. That was the example,</b></p> <p>17 <b>but --</b></p> <p>18 A. Mine was really basic. The very simple part of it</p> <p>19 is -- the first thing you do is you ask Windows for</p> <p>20 access to the game's process. Say, "Hey, can I have a</p> <p>21 handle?" You tell it the permissions you want, and it</p> <p>22 gives you a handle without permission or it doesn't.</p> <p>23 There's cases where it won't. So once you have a</p> <p>24 handle with permission to read and write the game, you</p> <p>25 then say, "Hey, Windows, give me some memory in the</p>	<p style="text-align: right;">Page 125</p> <p>1 game. I want to have some memory to call my own." And</p> <p>2 then you use that memory to manually map in the DLL.</p> <p>3 So this is the process that Windows does behind</p> <p>4 the scenes. I have looked at Windows object code of</p> <p>5 how it does this to figure it out. And what it does is</p> <p>6 it goes from that file-mapping into the virtual mapping</p> <p>7 and does the fix-ups that the program needs to run,</p> <p>8 basically mimicking Windows.</p> <p>9 <b>Q. So the loaders is inter- -- the loader is sitting on --</b></p> <p>10 <b>again, let's -- we're talking about your -- this</b></p> <p>11 <b>example. It's sitting on the -- it was originally</b></p> <p>12 <b>sitting on, in this example, Velocity Cheats's website,</b></p> <p>13 <b>but the user has downloaded it and it's actually</b></p> <p>14 <b>sitting on the user's --</b></p> <p>15 A. Hard drive.</p> <p>16 <b>Q. -- hard drive someplace. And then, so does the user --</b></p> <p>17 <b>the user then has the game running at the time that it</b></p> <p>18 <b>needs to access -- that it wants to access the cheat</b></p> <p>19 <b>file through the loader; right?</b></p> <p>20 A. Yes.</p> <p>21 <b>Q. It has -- it won't work otherwise?</b></p> <p>22 A. In this case, yes.</p> <p>23 <b>Q. Yes. Is there -- I mean, is there a world in which you</b></p> <p>24 <b>would be able to open a cheat for a game without having</b></p> <p>25 <b>the cheat of the game open -- the underlying game open?</b></p>

<p style="text-align: right;">Page 126</p> <p>1 A. You could -- I know that methods exist to, like,</p> <p>2 essentially preload the cheat. And then the</p> <p>3 application that would be making the noise, the loader</p> <p>4 could then be shut down. And then the user could start</p> <p>5 the game.</p> <p>6 Q. But --</p> <p>7 A. But that's not -- that's not what I've done. That's</p> <p>8 not what I did for Velocity Cheats. No.</p> <p>9 Q. The user doesn't see anything with respect to the cheat</p> <p>10 until there's -- until the game is running?</p> <p>11 A. Yes.</p> <p>12 Q. In either of those methods, yours or the other one that</p> <p>13 you described that you didn't use?</p> <p>14 A. Yeah. Much like the in-game components of Steam or</p> <p>15 Discord -- wouldn't be available until the game would</p> <p>16 come up.</p> <p>17 Q. All right. Do you have -- are you familiar with the</p> <p>18 cheat at issue in this litigation?</p> <p>19 MR. MANN: Object to the form.</p> <p>20 THE WITNESS: Can you be a little bit more</p> <p>21 specific by what you mean by "familiar"?</p> <p>22 Q. BY MR. RAVA: Have you had access to the cheat that's</p> <p>23 at issue in this litigation?</p> <p>24 A. At one point, it was available if I wanted to load it,</p> <p>25 but I never had access to the cheat -- the code or the</p>	<p style="text-align: right;">Page 127</p> <p>1 object code directly, no.</p> <p>2 Q. Did you ever load it?</p> <p>3 A. No.</p> <p>4 Q. Why not?</p> <p>5 A. I don't generally use cheats from other developers. I</p> <p>6 used to before I learned how to code cheats, create</p> <p>7 cheats. I found that the joy for me that came from</p> <p>8 essentially cheating in games wasn't the actual</p> <p>9 "running around the game killing everyone" thing.</p> <p>10 Yeah. That gets old after a while. For me, it was the</p> <p>11 process of building the cheat.</p> <p>12 So I've recently -- in the last few years, have</p> <p>13 rewritten an old cheat that I used to play with. And I</p> <p>14 haven't even played the game. I've just been</p> <p>15 playing -- poking around the cheat, testing it in,</p> <p>16 like, a little -- with a bot and then going -- and so</p> <p>17 that's the reason why I -- I don't use other people's</p> <p>18 cheats. Because it's just -- that's not enjoyable for</p> <p>19 me.</p> <p>20 Q. Did you -- you described earlier how you would</p> <p>21 essentially vet cheats before you offered them from</p> <p>22 AimJunkies in order to ensure that they weren't simply</p> <p>23 malware. Did you do that with this one?</p> <p>24 A. No.</p> <p>25 Q. Why not?</p>
<p style="text-align: right;">Page 128</p> <p>1 A. I hadn't done that in a while. I believe that the</p> <p>2 cheat was offered sometime in the end of 2019. I think</p> <p>3 that I had fallen out of practice of that before then.</p> <p>4 Q. Did someone else?</p> <p>5 A. Not that I know of.</p> <p>6 Q. Are you aware of other cheats offered by whoever</p> <p>7 developed this one?</p> <p>8 MR. MANN: Object to the form.</p> <p>9 THE WITNESS: I don't know.</p> <p>10 Q. BY MR. RAVA: Do you know who developed the Destiny 2</p> <p>11 cheat that's the subject of this litigation?</p> <p>12 A. I've been made aware through the course of the</p> <p>13 litigation.</p> <p>14 Q. And what's your understanding?</p> <p>15 A. To my understanding, it was created by Banek.</p> <p>16 Q. And who -- what is your understanding of Banek?</p> <p>17 A. It's someone who we sold some cheat products from,</p> <p>18 and -- and I believe that they're -- that's my</p> <p>19 understanding of who Banek is.</p> <p>20 Q. Do you have any understanding of whether they offered</p> <p>21 any other cheats through AimJunkies?</p> <p>22 A. I don't know.</p> <p>23 Q. Did you have any communications yourself with Banek?</p> <p>24 A. No.</p> <p>25 Q. None at all?</p>	<p style="text-align: right;">Page 129</p> <p>1 A. Not that I remember.</p> <p>2 Q. Do you have -- did you communicate with Mr. Conway</p> <p>3 about Banek outside of this litigation?</p> <p>4 A. I don't believe so.</p> <p>5 Q. Did you communicate with Mr. Schaefer about Banek in</p> <p>6 the course of the acquisition of this cheat?</p> <p>7 A. Not that I can remember.</p> <p>8 Q. Or since the acquisition of this cheat, but outside of</p> <p>9 the scope of this litigation?</p> <p>10 A. No. I don't think so.</p> <p>11 Q. Did you have any -- are you aware of any communications</p> <p>12 related to customer inquiries or customer service</p> <p>13 requests relating to the Destiny 2 cheat?</p> <p>14 A. Well, the -- no. No. I don't think that those exist</p> <p>15 anymore.</p> <p>16 Q. Did they exist at one point?</p> <p>17 A. Yeah. There was a forum section, I believe, on the --</p> <p>18 there was a section on the forum. There was a section</p> <p>19 for each cheat. And if that product becomes unviable</p> <p>20 or we're not selling it anymore, we'd have no need for</p> <p>21 the forum section anymore so we'd delete it.</p> <p>22 Q. Did you delete a forum section relating to the</p> <p>23 Destiny 2 cheat, then?</p> <p>24 A. I did not.</p> <p>25 Q. Did someone?</p>